

3.0009 On some *Cantharidae* (Coleoptera) of the United States

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The tribe *Omethini* as understood by Arnett and Fender in "The Beetles of the United States", 1963 needs revision.

The genus *Spathizus* Lec. included in *Omethini* should be removed from this tribe. As a matter of fact *Spathizus* Leconte (1884) falls into synonymy with *Thinalmus* Gorham (1881). *Thinalmus* again can only be considered as a subgenus of *Tytthonyx* Leconte (see: Wittmer, Mitt. Schweiz. Ent. Ges. 30, 1957, p. 154). Therefore *Spathizus bicolor* (Leconte) must be transferred to *Tytthonyx* subg. *Thinalmus*.

For *Tytthonyx* Arnett has created the tribe *Tytthonyini*, the correct name should be *Tytthonyxini*, to which *Thinalmus* should be added. For the moment I cannot decide myself whether this tribe can be maintained or not. This would involve a complete revision of all the genera of *Cantharidae*, a work which I hope to undertake later on.

The tribe *Omethini*, on the other hand, seems to be a very good division. Both genera *Omethes* Leconte and *Blatchleya* Knab are quite distinct from all the other *Cantharinae* by the form of the copulatory organ. This organ has a relatively free median lobe more similar to the *Malthinini*.

I also should like to point out that a second species has to be added to the genus *Omethes*, i.e. *Elianus rugiceps*. This genus and species were described by Lewis from Japan in 1895. Since Leconte described *Omethes* in 1861, *Elianus* falls into synonymy. I am particularly grateful to Hugh B. Leech of the California Academy of Sciences, San Francisco, who some time ago sent me specimens of *Omethes marginatus* which allow me to make this correction. The species from Japan is quite closely related to *marginatus*, the size is slightly smaller, head and prothorax of darker coloring, the latter without testaceous suture and the sides only occasionally and very narrowly testaceous.

Again to the courtesy of Mr. Leech I owe a few additional forms, which I am also including into the *Omethini*. One of the new genera, *Troglomethes* is of particular interest, because the head is transversally excavated. This formation is certainly the site of secretory pores of importance before or during copulation. The enlarged and excavated antennae of *Blatchleya gracilis* Blatchley no doubt also serve the same purpose. The excavated head, a characteristic found frequently in *Malachiidae* and other Coleoptera, is rare among the *Cantharidae*. To my knowledge so far only one other genus, *Pseudopodabrus* Pic, described from Tonkin, has an excavated head.

The different genera of *Omethini* males may be separated as follows:

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|--|-------------------------------|
| 1. Head simple, not transversally excavated | 2 |
| — Head transversally excavated | Troglomethes nov. gen. |
| 2. Antennae simple, no segments enlarged and excavated | 3 |
| — Two antennal segments enlarged and excavated | Blatchleya Knab |
| 3. Head strongly rugose, partly plicate. Basal angles of prothorax not completely rounded into base, all borders only slightly raised. Lateral lobes of copulatory organ very long, apparently not fused | Omethes Lec. |

— Head not rugose, almost smooth or little punctate. Basal angles of prothorax completely rounded into base, all borders quite strongly raised all around but particularly at sides. Lateral lobes of copulatory organ completely fused, forming a normal basal piece as in other Cantharinae**Symphymethes** nov. gen.

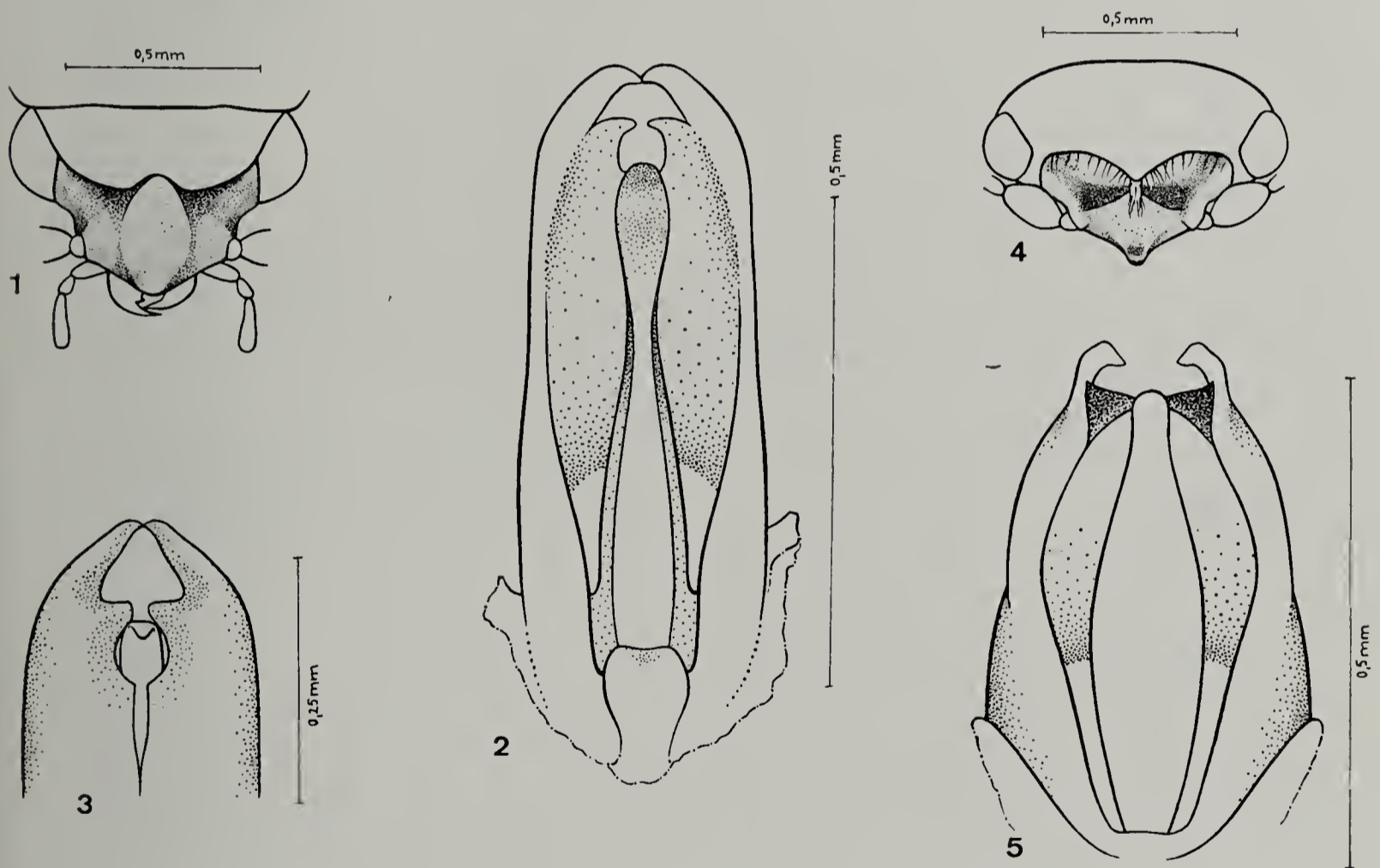
***Troglomethes* nov. gen.**

type species: *T. leechi* n. sp.

Male. General appearance of *Blatchleya*, but distinct by the formation of the head which is transversally excavated and by the simple antennae.

Mandibulae toothed. Last segment of maxillary palpus narrow, elongate. Antennae 11-segmented, simple. Prothorax transverse, sides almost parallel or rounded, basal angles more or less rounded with sides and base; all borders raised all around, but particularly at sides. Claws simple with a small toothlike formation at base. Copulatory organ with a strongly sclerotized dorsal basal piece, the suture of fusion well apparent, median lobe lying ventrally free, uncovered as in the other *Omethini*.

This genus seems to be endemic to the West Coast of the United States. Two species are referred to it, one from Oregon and the other from California, both new.



Figs. 1, Head of *Troglomethes leechi* n. sp. male; 2. Copulatory organ, ventral view of same; 3. Copulatory organ, dorsal view of same; 4. Head of *Troglomethes oregonensis* n. sp. male; 5. Copulatory organ, ventral view of same.

***Troglomethes leechi* n. sp.**

Male. Head, antennae, legs and prothorax yellow-testaceous, the latter with an ill defined brownish spot in the middle near the base, but without touching the base, scutellum, elytra and abdomen dark brown.

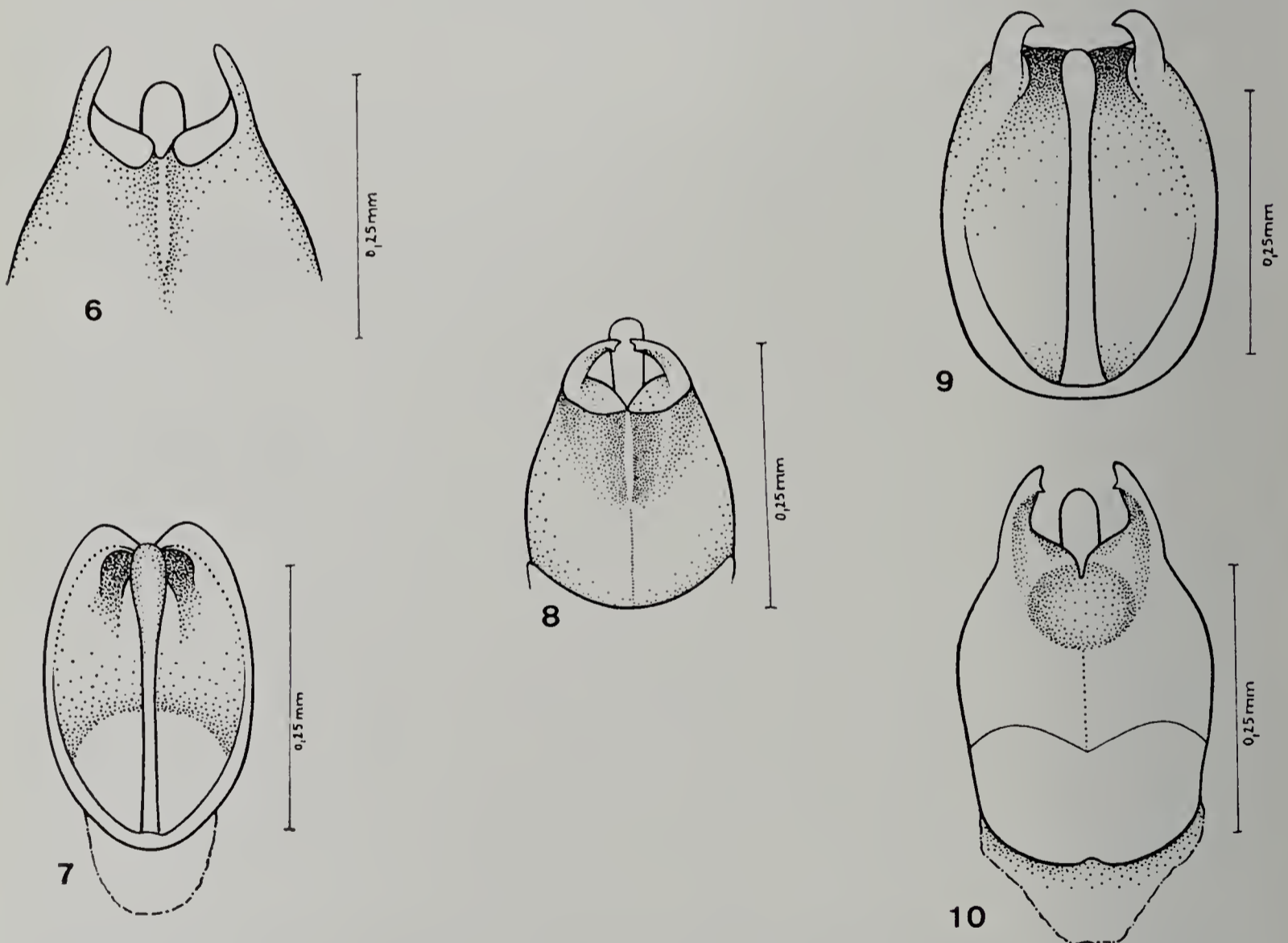
Head (Fig. 1) with the eyes narrower than the prothorax, frons, seen from above, with a strong bump, transversally excavated under the bump, excavation not reaching the eyes;

the excavation is covered in the middle by part of the antefrons which is extended backward to the bump, clypeus raised into a large nodule, surface above the excavation almost smooth with traces of extinct punctures. Antennae not too long and not too robust, all segments, except 11, slightly widened towards the tip, 2 half as long as 3, 3 to 8 of about the same size inter se. Prothorax broader than long, sides almost parallel, hind angles more strongly rounded than front angles, surface smooth, shining, pubescence almost invisible. Elytra elongate, rugose. Copulatory organ, ventral view Fig. 2, dorsal view Fig. 3 tip only.

Length: 3.5 mm.

Locality: USA, California, Glen Alpine, ex Fenyes collection, Holotype in the California Academy of Sciences, San Francisco.

I am placing provisionally 2 females of similar shape and coloration to this species. Both were found in California and bear the following labels: Yosemite Valley, 7.7.1921, leg. Van Dyke and Tallac, Eldorado Co., ex coll. F. E. Blaisdell, both in the California Academy of Sciences, San Francisco.



Figs. 6. Copulatory organ, dorsal view of same; 7. Copulatory organ, ventral view of *Symphyomethes blandulus* n. sp. male; 8. Copulatory organ, dorsal view of same; 9. Copulatory organ, ventral view of *Symphyomethes californicus* n. sp. male; 10. Copulatory organ, dorsal view of same.

Glen Alpine is in El Dorado County, California, five miles south of the southwest corner of Lake Tahoe, altitude 6800 feet. Tallac was a resort area at the south end of Lake Tahoe, just west of what is now Camp Richardson, altitude 6240 feet.

***Troglomethes oregonensis* n. sp.**

Male. Head, prothorax and scutellum dark brown, sides of the prothorax narrowly brownish-testaceous, antennae, elytra and legs brownish-testaceous.

Head (Fig. 4) with the eyes narrower than the prothorax, frons, seen from above, quite convex, transversally excavated between the eyes, excavation not quite reaching the eyes, frons extended in the middle into an obtuse prominence, under which a fine tuft of long hairs appears, which is placed on another prominence just under the one mentioned before; clypeus extended into a noselike projection with rounded tip. Antennae not reaching the hind coxae, quite robust, all segments, except 11, slightly widened towards the tip, 3 almost twice as long as 2, 3 to 10 of about the same size inter se, 11 the longest of all, about one half longer than 10. Prothorax much broader than long, sides rounded and narrowed towards base, basal angles completely rounded (with the sides and base), surface smooth, shining, pubescence almost invisible. Elytra elongate, in the middle, puncture disappearing towards apex, here rugose. Copulatory organ, ventral view Fig. 5, dorsal view Fig. 6.

Length: 4 mm.

Locality: USA, Oregon, Cannon Beach, 12.6.1927, leg. E. C. Van Dyke. Holotype in the California Academy of Sciences, San Francisco.

Somewhat larger in size than *T. leechi*, to be distinguished easily by the differently excavated head, see figures.

***Symphymethes* nov. gen.**

type species: *S. blandulus* n. sp.

Male. General appearance of *Troglomethes*, but distinct by the simple, unexcavated head. Differs from *Blatchleya* by the simple antennae and the quite strongly raised borders of the prothorax.

Mandibulae toothed. Last segment of maxillary palpus narrow, elongate. Antennae 11-segmented, simple. Prothorax transverse, sides strongly rounded, basal angles completely rounded with the sides and base, all borders quite strongly raised all around but particularly at sides. Claws simple with a small toothlike formation at base. Copulatory organ with a strongly sclerotized dorsal basal piece, the suture of fusion quite well apparent, median lobe lying ventrally free, uncovered as in the other *Omethini*.

Two species are referred to this genus, both from California and both new.

***Symphymethes blandulus* n. sp.**

Male. Brown, head blackish, mouthparts, antennae, most of the femora, tip and base of tibiae and tarsi yellow-testaceous.

Head with the eyes narrower than the prothorax, vertex slightly convex, surface smooth, brilliant, a few extinguished punctures apparent, pubescence scarce. Antennae rather short and stout, all segments slightly widened towards the tip, 3 more strongly narrowed towards the base than the following, 3 longer than 2, 4 longer than 3, 5 slightly longer than 4, 5 to 8 of the same length, 9 and 10 a little shorter than 8, 11 the longest. Prothorax strongly transverse, almost twice as broad as long, sides completely rounded with the front and basal angles, surface almost smooth, a few strong punctures along the borders. Elytra widened towards the tip, covering the abdomen and the wings completely, surface extinctly rugose, hairs sparse and quite long. Copulatory organ Figs. 7 & 8.

Length: 2.5 mm.

Locality: USA, California, Mendocino, 14.7.1954, leg. J. Helfer, from Redwood litter. Holotype in California Academy of Sciences, San Francisco. Mendocino is on the coast of Mendocino County; much of Mr. Helfer's collecting has been done 1.5 mi. north of town, at an altitude of 200 feet.

Symphyomethes californicus n. sp.

Male. Brown, prothorax testaceous, with the borders becoming gradually yellower all around.

Head with the eyes narrower than the prothorax, vertex slightly convex, two shallow depressions between antennal bases, surface quite strongly punctate, hairs very short, not abundant, much shorter than on prothorax. Antennae reaching to about middle of elytra, almost all segments very slightly widened towards the tip, segment 2 shorter than 3, 4 longer than 3, 4 to 8 of about the same length, 9 & 10 shorter than 8, 11 longer than 8. Prothorax strongly transverse, not quite twice as broad than long, sides completely rounded with the front and basal angles, surface almost smooth, a few somewhat obsolete punctures along the borders. Elytra widened towards the tip, covering the abdomen and the wings completely, surface rugose, hairs quite dense. Copulatory organs Figs. 9 & 10.

Length: 3.5 mm.

Locality: USA, California, Mokel Hill, April, leg. F. E. Blaisdell. Holotype in California Academy of Sciences, San Francisco.

Larger in size than *blandulus*. To be distinguished by the quite strongly punctate head and the testaceous prothorax with the yellow borders. In *blandulus* the head is smooth, unpunctured and the prothorax is of the same colour than the elytra. Mokelumne Hill is in Calaveras County, California, nine miles north of San Andreas, and at an altitude of 1475 feet. Dr. Blaisdell practiced medicine there for many years.

3.0009. On some Cantharidae (Coleoptera) of the United States. W. Wittmer.

ABSTRACT—The tribe Omethini of the family Cantharidae is revised and two new genera, *Trogomethes* and *Symphyomethes*, are added to the existing genera, *Blathleya* and *Omethus*. For each of the new genera two new species are described.—N. M. D.

DESCRIPTORS: Coleoptera; Cantharidae; Trogomethes; Symphyomethes; Blathleya; Omethes; new genera; keys; new species; Pacific States.